Dino-Lite Handheld Digital Microscope

AM413T

User's Manual

Thank you for choosing Dino-Lite Handheld Digital Microscope!

Dino-Lite Handheld Digital Microscope has a wide scope of applications, such as,

1. Skin Check
2. Scalp Check
3. Industrial Inspection e.g. Printing Circuit Board(PCB)inspection, electronics device inspection
4. Visual Assistance
5. Printing Inspection
6. Textile Inspection
7. Jewelry Inspection
8. Science Learning
9. ….. etc.

Please read this manual carefully before using Dino-Lite Handheld Digital Microscope.

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Product Specifications

1. Resolution：1.3M.
2. Built-in 1 optical lens.
3. Magnification power：10x~200x.
4. Measurement function (via software)
5. Microtouch function
6. Built-in LED light, with LED software switch
7. Frame rate： up to 30 FPS
8. Interface：USB (PC)

Remarks: The magnification power is the ratio of the real size of the an observe object vs. the image show on a 15” monitor

Safety Precautions

1. Avoid touching the lens with finger to protect the product from electrostatic damage.
2. Do not attempt to service this product yourself. Opening the covers may expose you to dangerous voltage points or other risks.
3. When hands are wet, do not plug in or remove the adaptor or other connectors.
4. Using or storing Dino-Lite Handheld Digital Microscope, do not plug in any other cables, not belong to Dino Digital Microscope.
5. Do not use any detergent or volatile solution, which will damage the camera case, painted surfaces & lens. Only use a soft cleaning cloth.
6. If the lens is dirty, please use a kens brush on soft cloth to wipe clean. Avoid touching them with your fingers. Exercise care to avoid scratching the lens.
7. Without protection, do not put Dino Digital Microscope outdoor to avoid the lens damaged by high temperature or humidity.
8. Using and storing Dino Digital Microscope at Temp: 0°C~ 40°C, Humidity: 45%~85%.
9. If water has entered Dino Digital Microscope device and the inspection stage, immediately turn the power off and remove the USB cable. Do not use dryer neither.
10. Using or storing Dino-Lite Handheld Digital Microscope, need to watch all

cables to avoid trip over or Dino-Lite Handheld Microscope fall down.

11. To avoid electric shock, remove all electricity source before moving PC or TV.

Contents and Name of Parts

1. Dino-Lite Handheld Digital Microscope Device
2. CD (user's manual included)
3. USB Cable《USB2.0 / 1.1》 (1.8m)
4. Dock

Connecting to PC

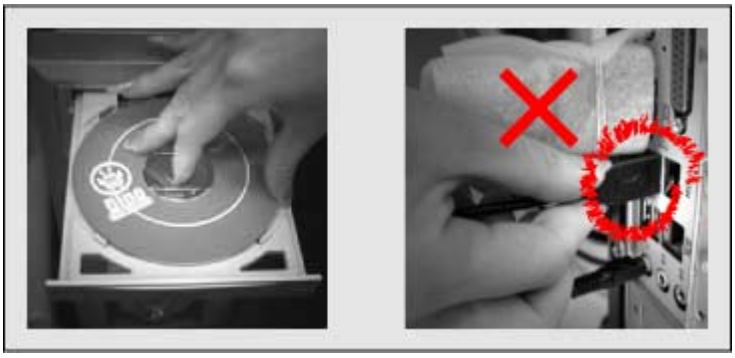
System Requirements

- PC's system requirements:
  - ✓ OS: Windows 98se, 2000, XP
  - ✓ CPU: Pentium IV 1.5G, Celeron, AMD Athlon or above

- ✓ Memory: 128MB
- ✓ HDD storage space: at least 150MB
  (for driver and application software installation)
- ✓ Graphic card: 16-bit or above
- ✓ CD-ROM driver
- ✓ USB2.0 / 1.1 port

Driver Installation Procedure

■ Power on PC and place installation CD into CD-ROM driver, do not connect USB Cable from Dino-Lite Handheld Digital Microscope to PC before driver installation.



■ Select driver installation, and follow the instructions to complete installation.

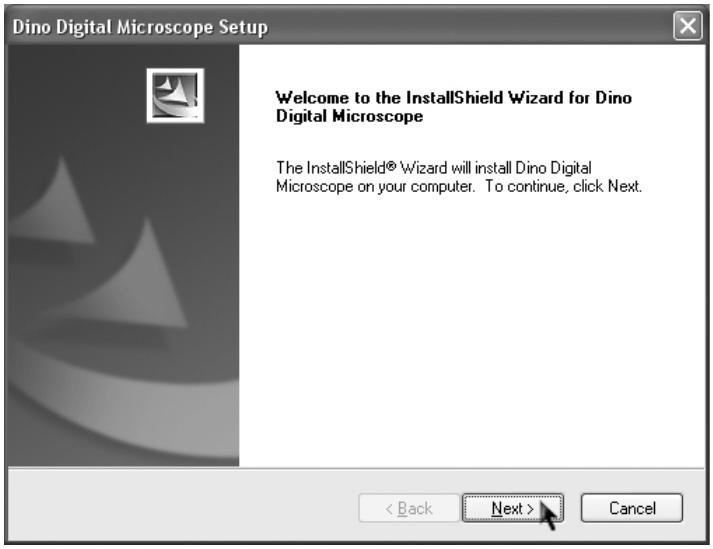
■ As driver installation completed, and if system asking for re-start, please re-start the Windows OS.

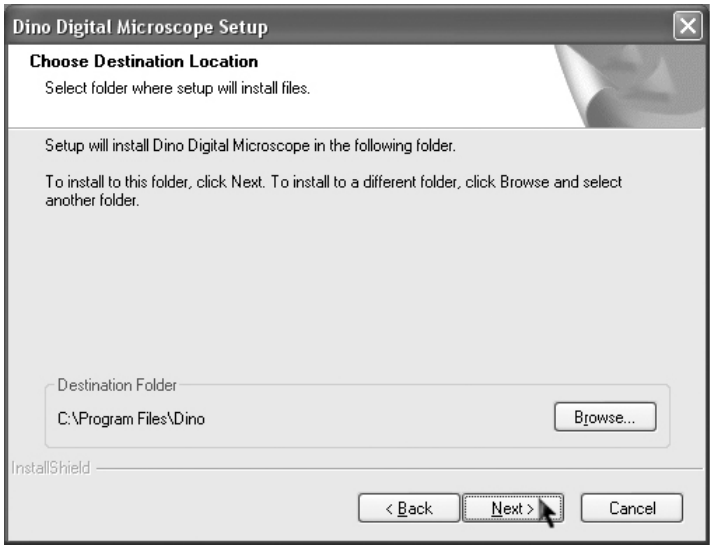
Note: The driver needs to be installed only once for each computer.

Windows XP

1. Place the installation CD into CD-ROM driver, the installation program should be started automatically. Otherwise, please execute the AUTORUN.EXE directly from the CD.
2. Select "Driver Installation" from Dino-Lite Handheld digital Microscope Installation menu screen as shown.

3. Click "Next" to continue, as shown.


Dino Digital Microscope Setup
Welcome to the InstallShield Wizard for Dino Digital Microscope
The InstallShield® Wizard will install Dino Digital Microscope on your computer. To continue, click Next.
< Back
Next >
Cancel

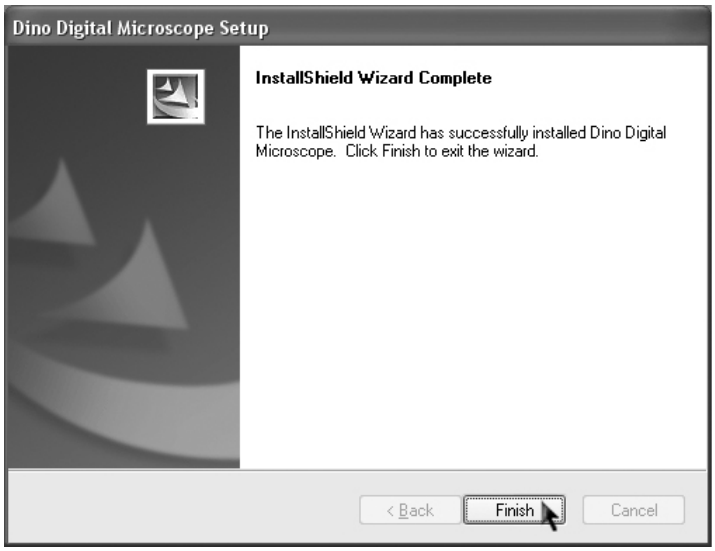

Dino Digital Microscope Setup
Choose Destination Location
Select folder where setup will install files.
Setup will install Dino Digital Microscope in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\Dino
Browse...
InstallShield
< Back
Next >
Cancel

Dino Digital Microscope Setup
Start Copying Files
Review settings before copying files.
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
Target Directory:
C:\Program Files\Dino
Program Folder:
Dino Digital Microscope
InstallShield
< Back
Next >
Cancel

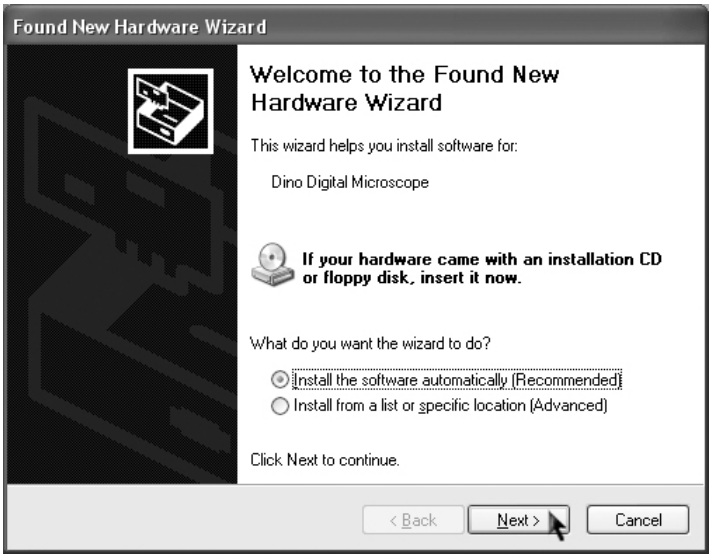
4. When the "Software Installation" warning message appears, click "Continue Anyway".

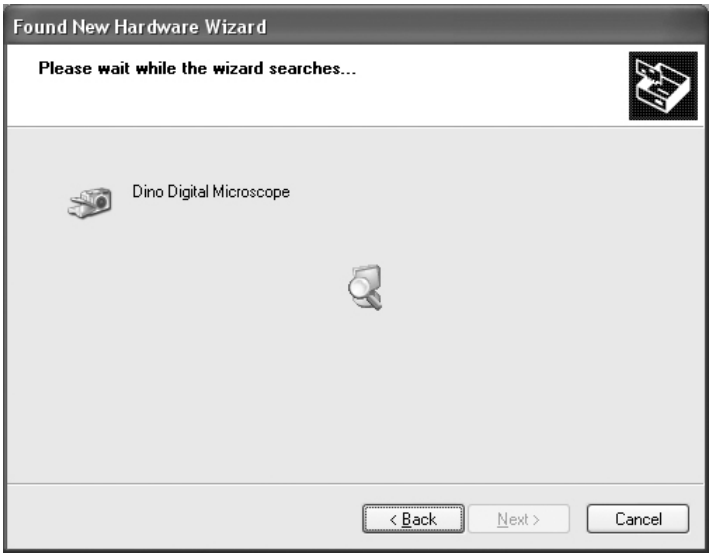
Software Installation
The software you are installing has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the software vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

5. Click "Finish" to complete the installation.

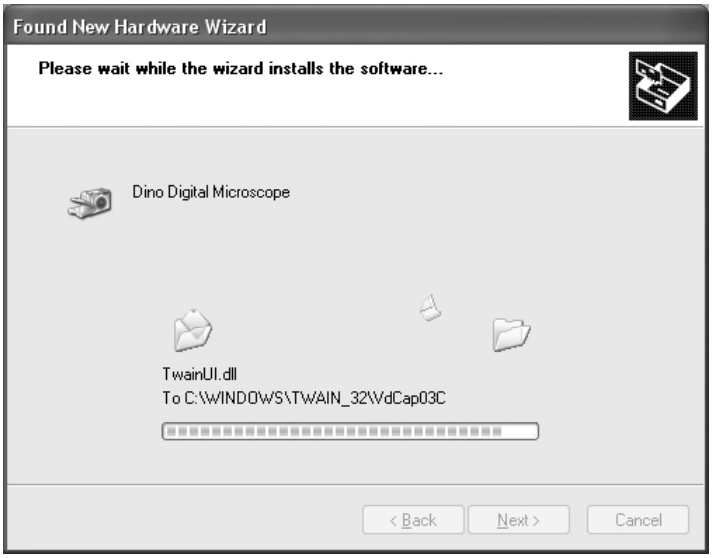

Dino Digital Microscope Setup
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Dino Digital Microscope. Click Finish to exit the wizard.
< Back
Finish
Cancel

6. Plug USB Cable to Dino-Lite Handheld Digital Microscope to connect with PC, a "Found New Hardware Wizard" will then appear. Click "Next" to continue.


Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install software for:
Dino Digital Microscope
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel



Hardware Installation
The software you are installing for this hardware:
Dino Digital Microscope
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

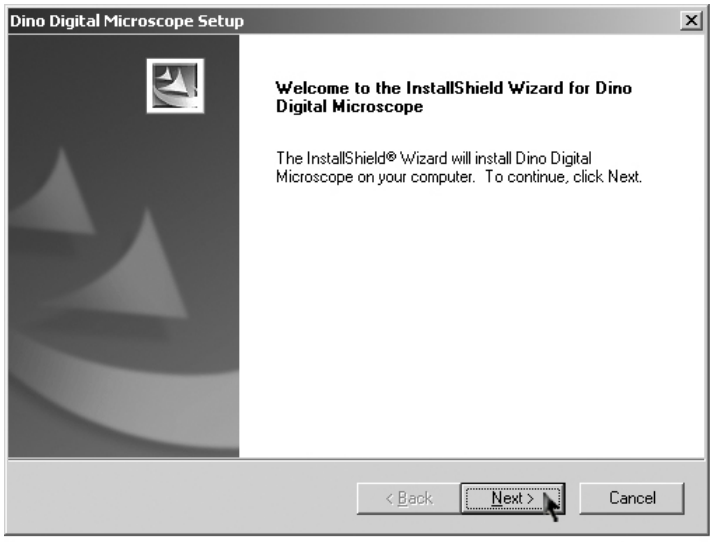

Found New Hardware Wizard
Please wait while the wizard installs the software...
Dino Digital Microscope
TwainUI.dll
To C:\WINDOWS\TWAIN_32\VdCap03C
< Back
Next >
Cancel

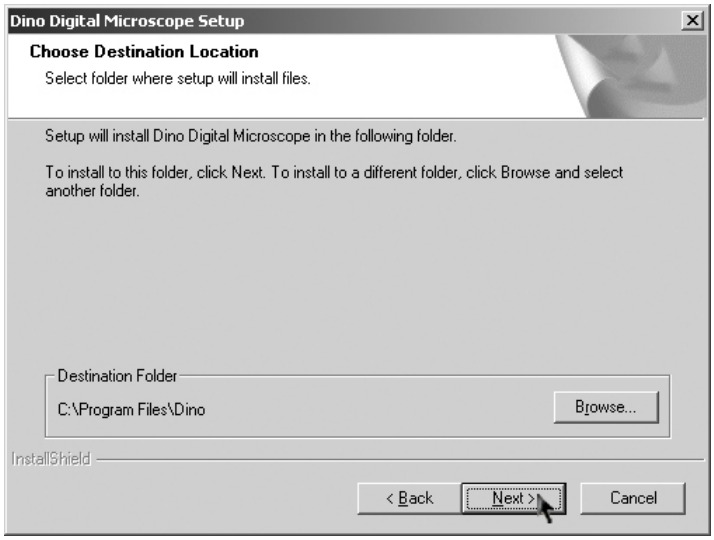
Found New Hardware Wizard
Completing the Found New Hardware Wizard
The wizard has finished installing the software for:
Dino Digital Microscope
Click Finish to close the wizard.
< Back
Finish
Cancel

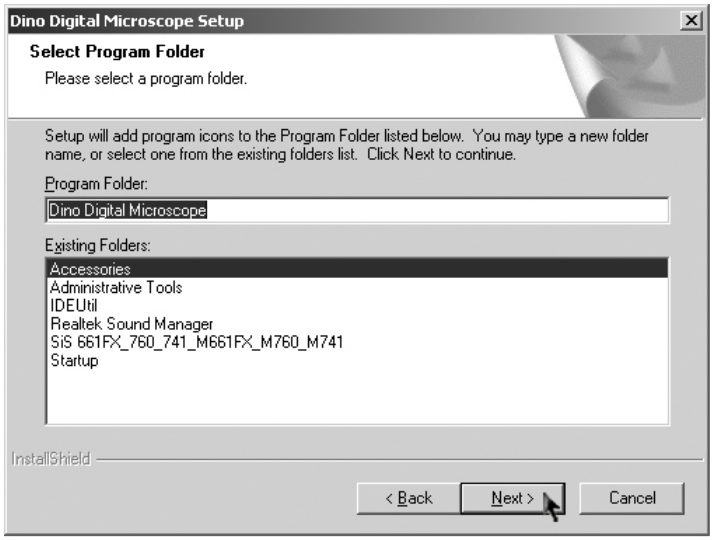
Windows 2000

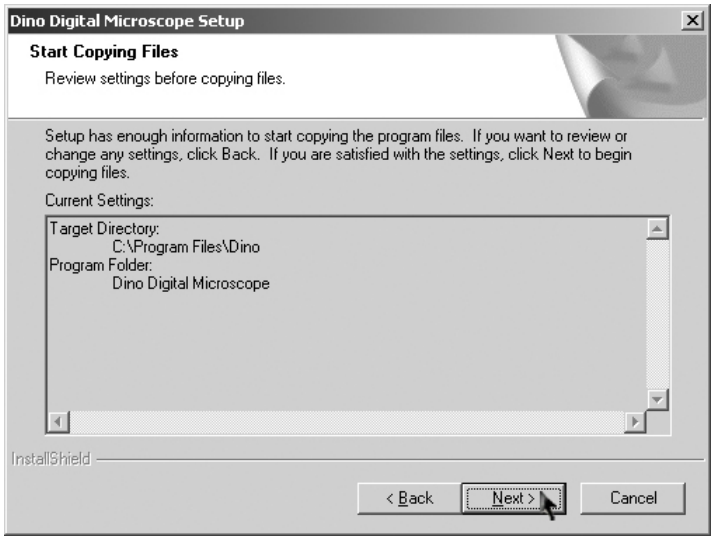
1. Place the installation CD into CD-ROM driver, the installation program should be started automatically. Otherwise, please execute the AUTORUN.EXE directly from the CD.
2. Select "Driver Installation" from Dino-Lite Handheld digital Microscope Installation menu screen as shown.

3. Click "Next" to continue, as shown.

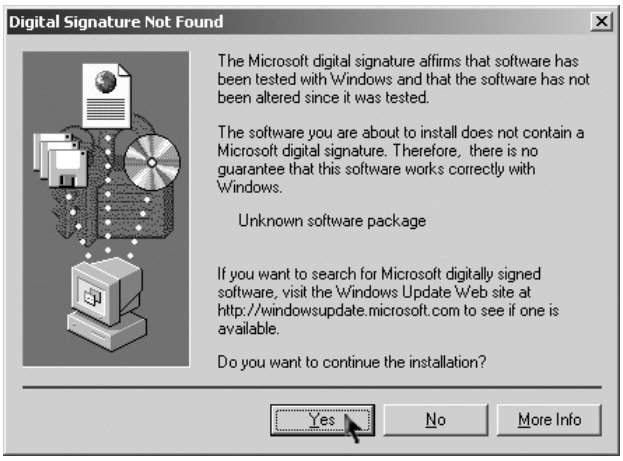

Dino Digital Microscope Setup
Welcome to the InstallShield Wizard for Dino Digital Microscope
The InstallShield® Wizard will install Dino Digital Microscope on your computer. To continue, click Next.
< Back
Next >
Cancel


Dino Digital Microscope Setup
Choose Destination Location
Select folder where setup will install files.
Setup will install Dino Digital Microscope in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\Dino
Browse...
InstallShield
< Back
Next >
Cancel

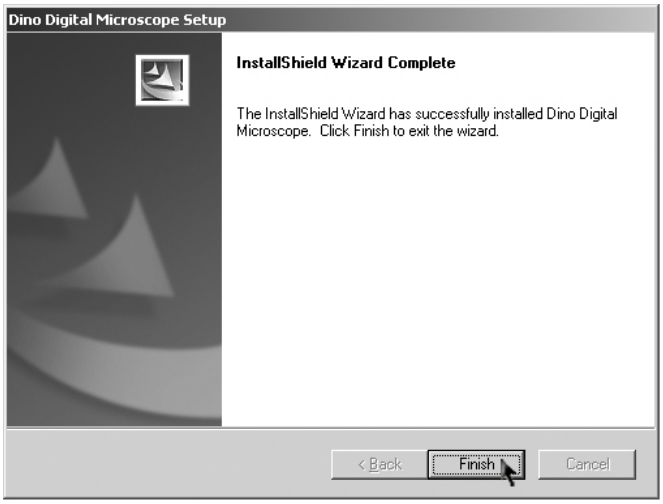

Dino Digital Microscope Setup
Select Program Folder
Please select a program folder.
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing folders list. Click Next to continue.
Program Folder:
Dino Digital Microscope
Existing Folders:
Accessories
Administrative Tools
IDEUtil
Realtek Sound Manager
SiS 661FX_760_741_M661FX_M760_M741
Startup
InstallShield
< Back
Next >
Cancel


Dino Digital Microscope Setup
Start Copying Files
Review settings before copying files.
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
Target Directory:
C:\Program Files\Dino
Program Folder:
Dino Digital Microscope
InstallShield
< Back
Next >
Cancel

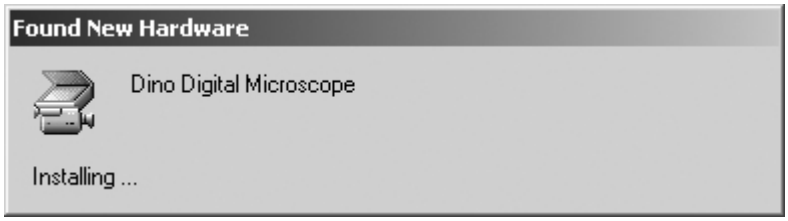
4. When the "Digital Signature Not Found" warning message appears, click "Yes" to continue the installation.

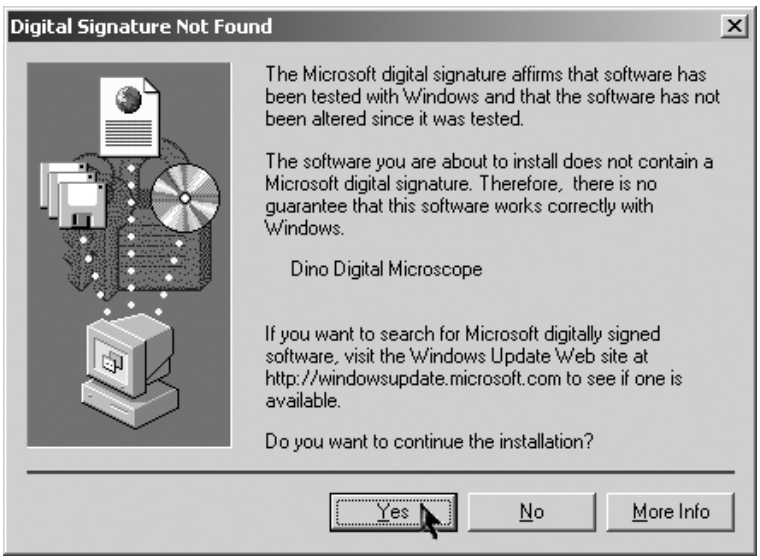

Digital Signature Not Found
The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested.
The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows.
Unknown software package
If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available.
Do you want to continue the installation?
Yes
No
More Info

5. Click "Finish" to complete the installation.


Dino Digital Microscope Setup
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Dino Digital Microscope. Click Finish to exit the wizard.
< Back
Finish
Cancel

6. Plug USB Cable to Dino-Lite Handheld Digital Microscope to connect with PC

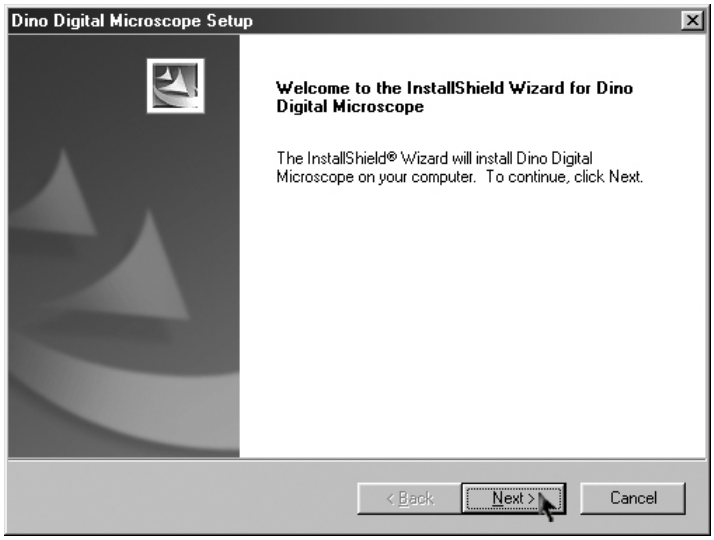


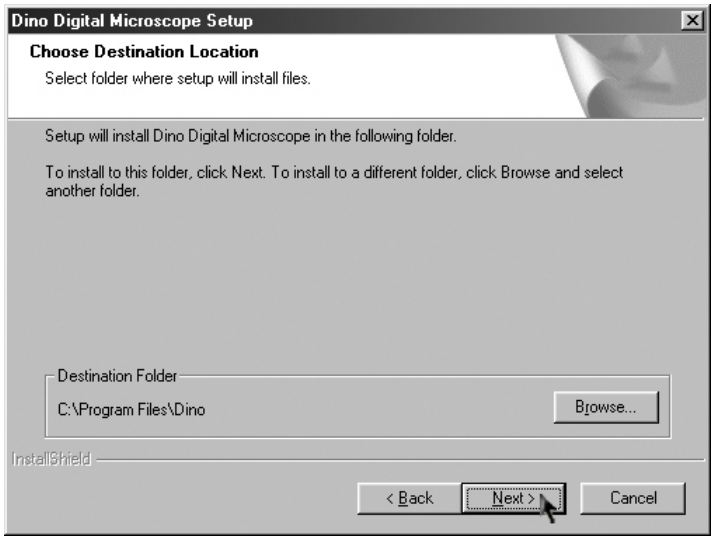

Digital Signature Not Found
The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested.
The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows.
Dino Digital Microscope
If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available.
Do you want to continue the installation?
Yes
No
More Info

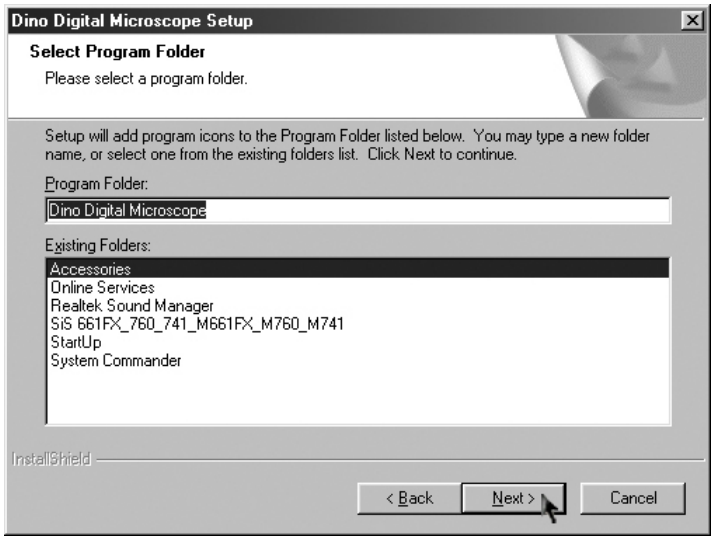
Windows 98se

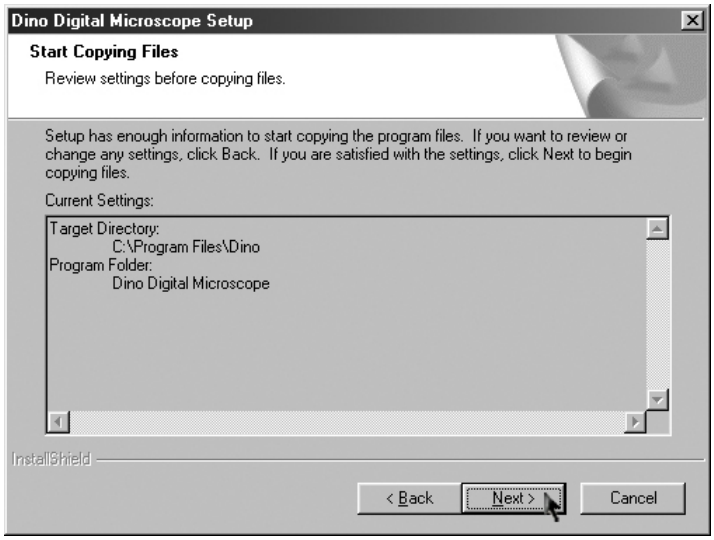
1. Place the installation CD into CD-ROM driver, the installation program should be started automatically. Otherwise, please execute the AUTORUN.EXE directly from the CD.
2. Select "Driver Installation" from Dino-Lite Handheld digital Microscope Installation menu screen as shown.

3. Click "Next" to continue, as shown.

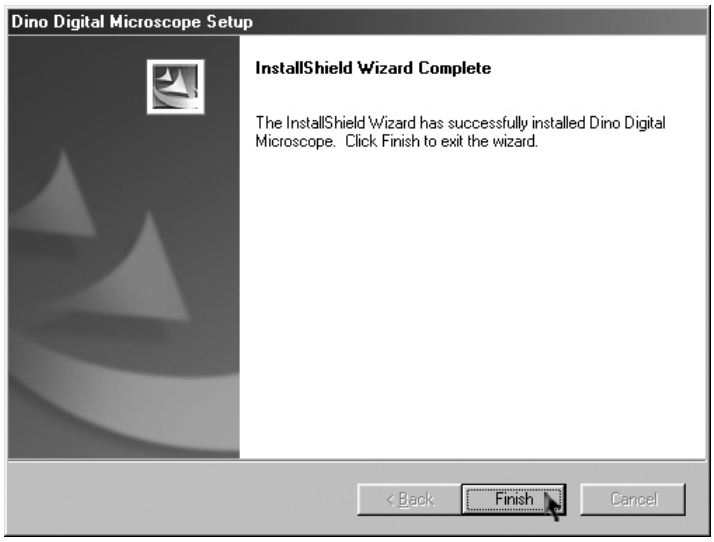

Dino Digital Microscope Setup
Welcome to the InstallShield Wizard for Dino Digital Microscope
The InstallShield® Wizard will install Dino Digital Microscope on your computer. To continue, click Next.
< Back
Next >
Cancel


Dino Digital Microscope Setup
Choose Destination Location
Select folder where setup will install files.
Setup will install Dino Digital Microscope in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\Dino
Browse...
InstallShield
< Back
Next >
Cancel


Dino Digital Microscope Setup
Select Program Folder
Please select a program folder.
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing folders list. Click Next to continue.
Program Folder:
Dino Digital Microscope
Existing Folders:
Accessories
Online Services
Realtek Sound Manager
SiS 661FX_760_741_M661FX_M760_M741
StartUp
System Commander
InstallShield
< Back
Next >
Cancel

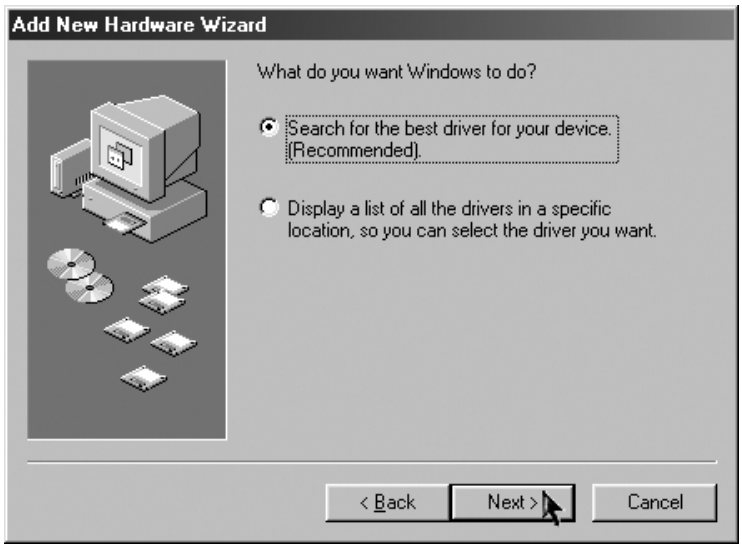

Dino Digital Microscope Setup
Start Copying Files
Review settings before copying files.
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings:
Target Directory:
C:\Program Files\Dino
Program Folder:
Dino Digital Microscope
InstallShield
< Back
Next >
Cancel

4. Click "Finish" to complete the installation.

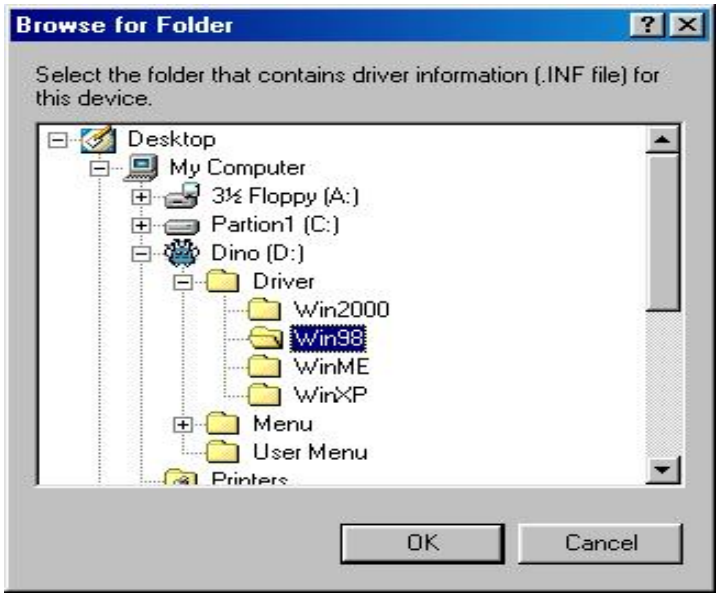

Dino Digital Microscope Setup
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Dino Digital Microscope. Click Finish to exit the wizard.
< Back
Finish
Cancel

5. Plug USB Cable to Dino-Lite Handheld Digital Microscope to connect with PC

Add New Hardware Wizard
This wizard searches for new drivers for:
Dino Digital Microscope
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

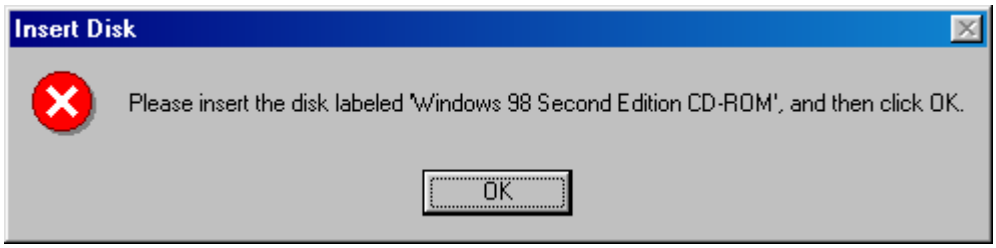

Add New Hardware Wizard
What do you want Windows to do?
Search for the best driver for your device. (Recommended).
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

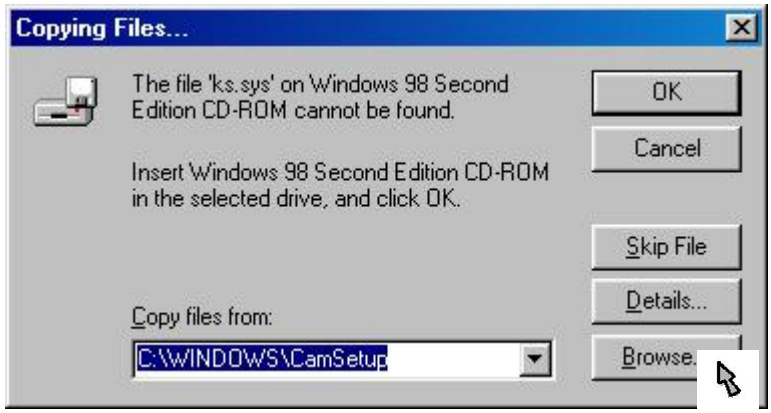
Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
D:\Driver\Win98
Browse...
< Back
Next >
Cancel

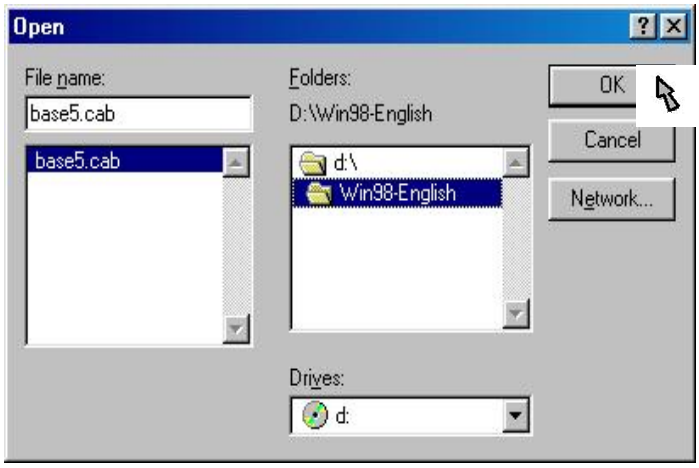

Browse for Folder
Select the folder that contains driver information (.INF file) for this device.
Desktop
My Computer
3½ Floppy (A:)
Partion1 (C:)
Dino (D:)
Driver
Win2000
Win98
WinME
WinXP
Menu
User Menu
Printers
OK
Cancel

Add New Hardware Wizard
Windows driver file search for the device:
Dino Digital Microscope
Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
Location of driver:
E:\DRIVER\WIN98\CVDNONSX.INF
< Back
Next >
Cancel

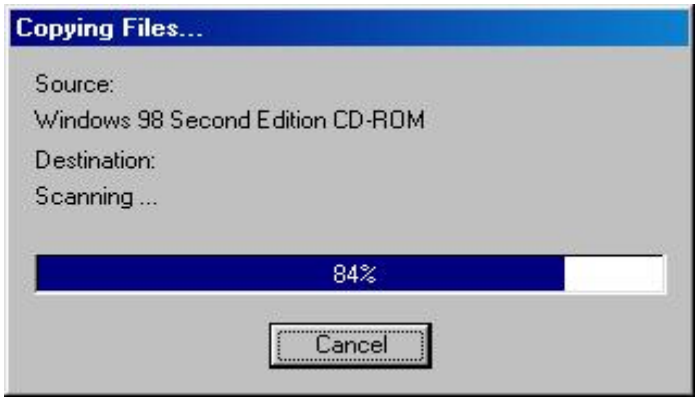
6. When the following message appears, please insert the Windows 98 Second Edition CD-ROM.






Open
File name:
base5.cab
base5.cab
Folders:
D:\Win98-English
d:\
Win98-English
OK
Cancel
Network...
Drives:
d:

Copying Files...
The file 'ks.sys' on Windows 98 Second Edition CD-ROM cannot be found.
Insert Windows 98 Second Edition CD-ROM in the selected drive, and click OK.
OK
Cancel
Skip File
Details...
Browse...
Copy files from:
D:\Win98-English


Copying Files...
Source:
Windows 98 Second Edition CD-ROM
Destination:
Scanning ...
84%
Cancel

Add New Hardware Wizard
Dino Digital Microscope
Windows has finished installing the software that your new hardware device requires.
< Back
Finish
Cancel

Connecting Procedure

The following procedure will show you how to properly connect Dino-Lite Handheld Digital Microscope with your PC.

Connect USB Cable on Microscope Device to PC USB port.

Operate Dino-Lite Handheld Digital Microscope

The following procedure will show you how to operate Dino Digital Microscope.

1. To have up-right image, suggest placing Dino-Lite Handheld Digital Microscope as shown.
2. Put the to-be-observed object near the Dino-Lite Handheld Digital Microscope.

3. Adjust the focus: Use the thumb to rotate the area A as shown.

4. The magnification power will be higher if Dino-Lite Handheld Digital Microscope is closer to the observed object.

   Remark: Can also use Video Setting function of DinoCapture for image adjustment. (Please refer to page 25)

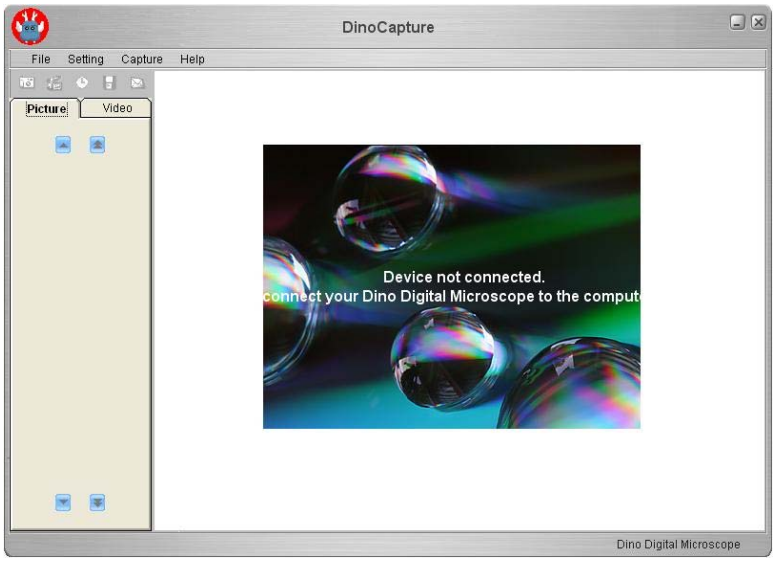
5. When the object is located at the top of the front cap, there are two focus positions, each with different magnification power, can be found by rotating the focus knob.

DinoCapture Application Software

Note: Before start DinoCapture, please make sure Dino-Lite Handheld Digital Microscope has been connected to PC via USB.

Click DinoCapture, the DinoCapture main screen will be shown as below.

The right hand side display the real-time image under the microscope. If Dino-Lite Handheld Digital Microscope has not been found while opening the DinoCapture, the message will be prompted as below.



Tool Bar Description

Take Picture

Take Video

Take Time Lapsed Video

Save as

Mail

Picture / Video Folder

Picture / Video folder is on the left side of the program, which contains the thumbnails of picture or video captured by the program.
The file in the folder will not be automatically deleted when leaving the program. But it is still suggested to save the picture or video and keep the folder clean for file security and program's performance concern.

Thumbnail Notation

Grey shadow -- The picture or video has not yet been saved.

Orange shadow -- The picture or video has been saved.

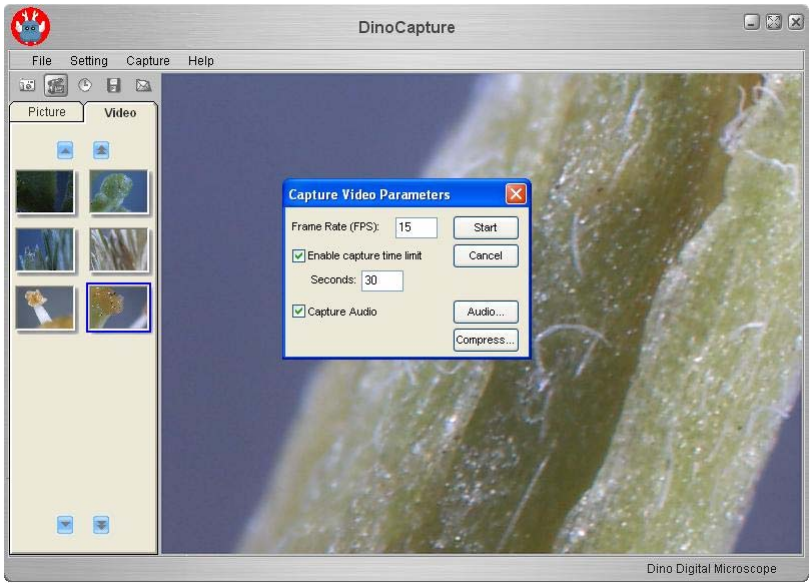
Blue frame –- The picture or video is selected.
The selected picture or video can thus be opened, be saved, be copied , be shared, be mailed or be deleted.

Take Picture

The picture can be taken either by clicking the icon on Tool Bar or by selecting “Picture” under Capture Menu.

Take Video

The Video can be taken either by clicking the icon on Tool Bar or by selecting “Video” under Capture Menu.

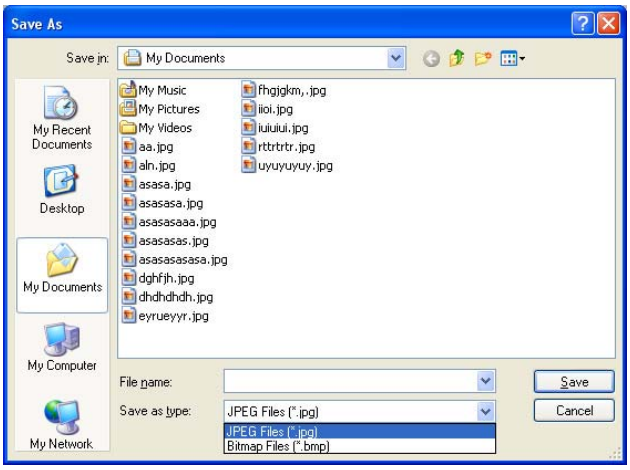


Take Time Lapsed Video

The Time Lapsed Video can be taken either by clicking the icon on Tool Bar or by selecting “Frames” under Capture Menu.

Save Picture or Video

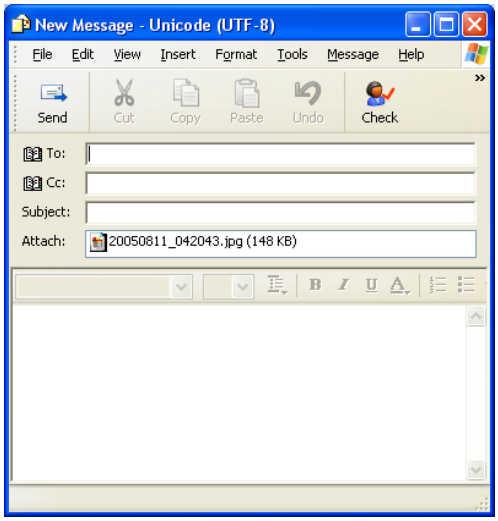
The file can be saved as “jpg” or “bmp”, by either clicking in the Tool Bar or by selecting “Save as” under the File Menu . The selected file in the folder will then be saved as prompted below.



Mail

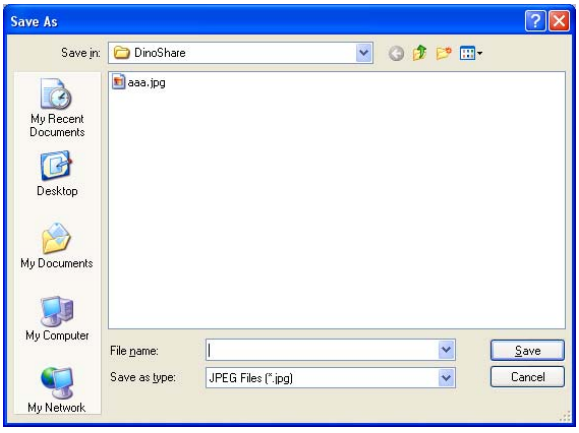
Click “Mail” : The file name is same as system’s.

The selected file can be mailed by clicking in the Tool Bar, or by selecting “Mail” under the File Menu.



Share

Click “share” in the File Menu.



Full Screen Display:

The real time display can be enlarged to full screen by clicking on the upper right corner of the window.

To return from full screen mode, please click "**Alt + Tab**".

Menu Function List

1. File Menu

Open -- To open the selected picture or video.

Save As -– To save the selected picture or video.

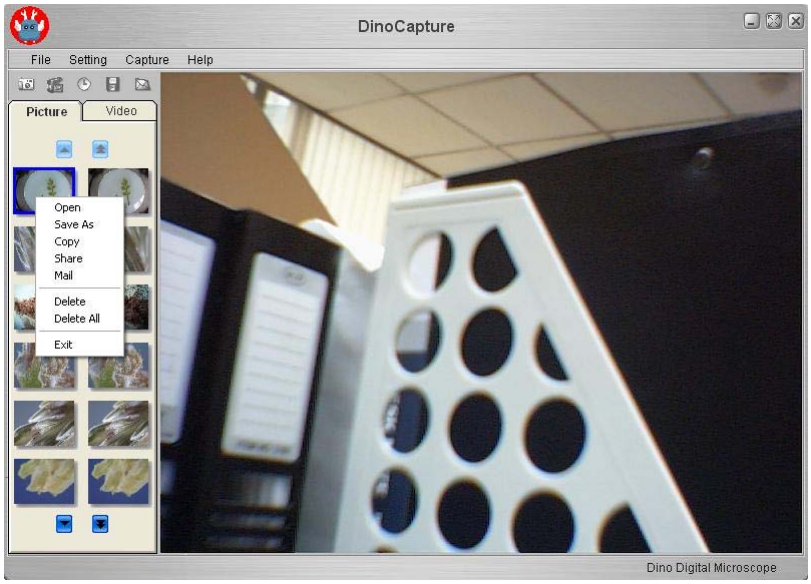
Share -– Save the picture or video file to DinoShare folder, under the Shared Document.

Mail -- To mail the selected picture or video.
The picture will be mailed in JPG format automatically.

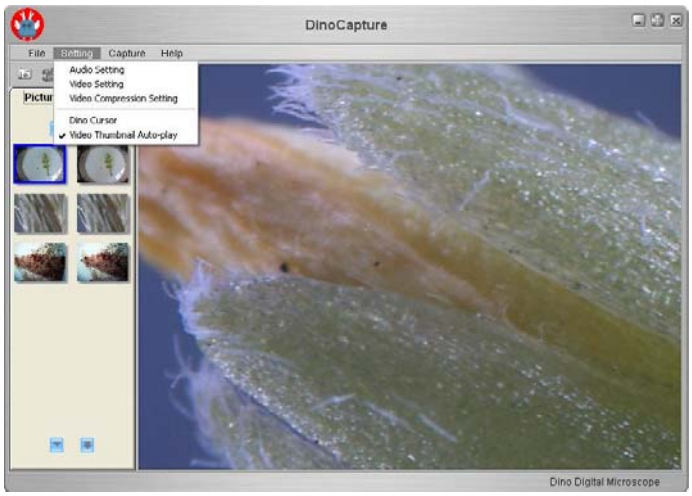
Delete -- To delete the selected picture or video.

Delete All – To delete all the files in selected folder, picture or video.

On display thumbnail picture, click mouse right key, the functions showed are same as file's.

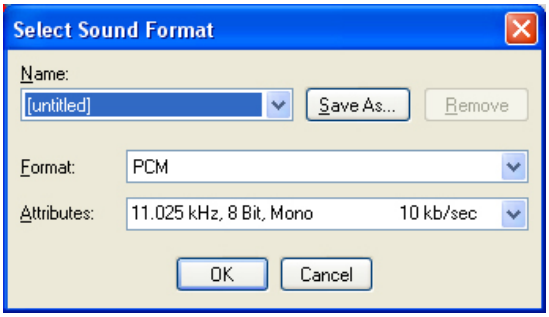


2. Setting



Audio Setting

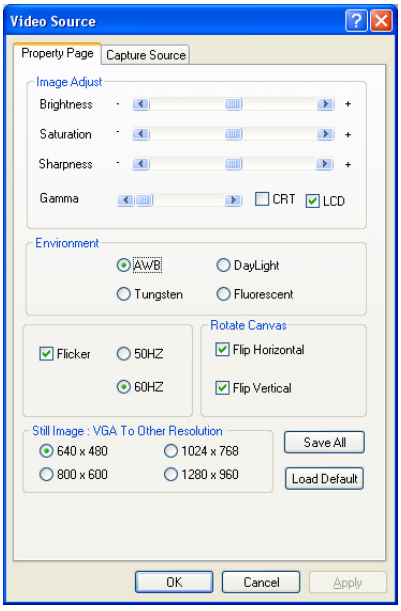
The user can select the quality of audio file to be recorded.



Video Setting

The user can set the parameter of video.

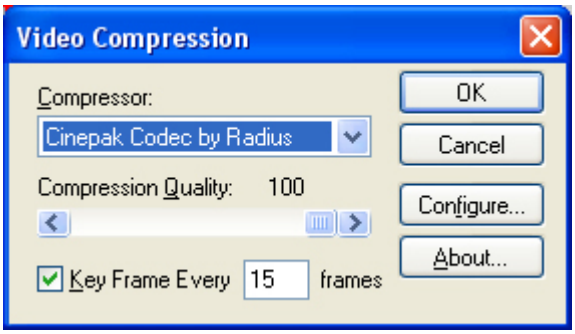
Note: The resolution setting is not useful.



Video Compression Setting

The user can select the compressor for video recording.

Note: The video quality may be varied with different compressor.



Dino Cursor

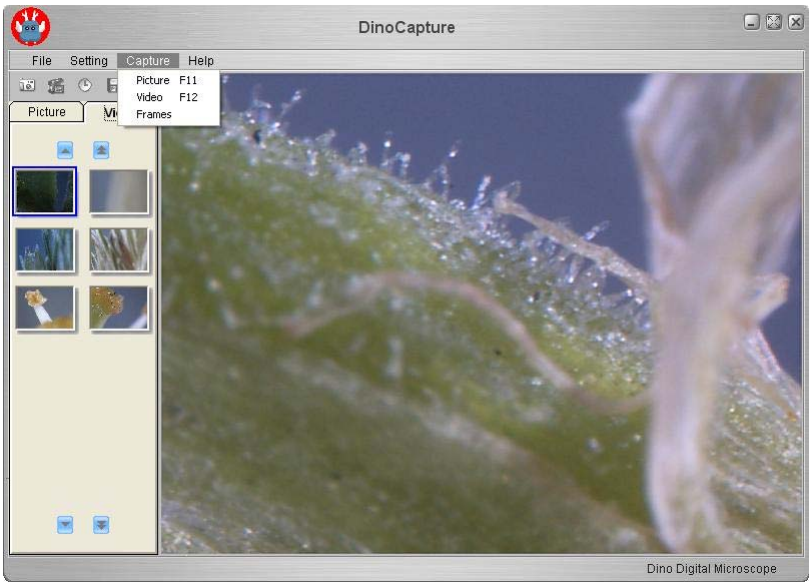
The Dino Cursor can be switched on or off.

Video Thumbnail Auto-play

The thumbnail auto play can be switched on or Off. If thumbnail auto play is enabled, the video will play when cursor move over.

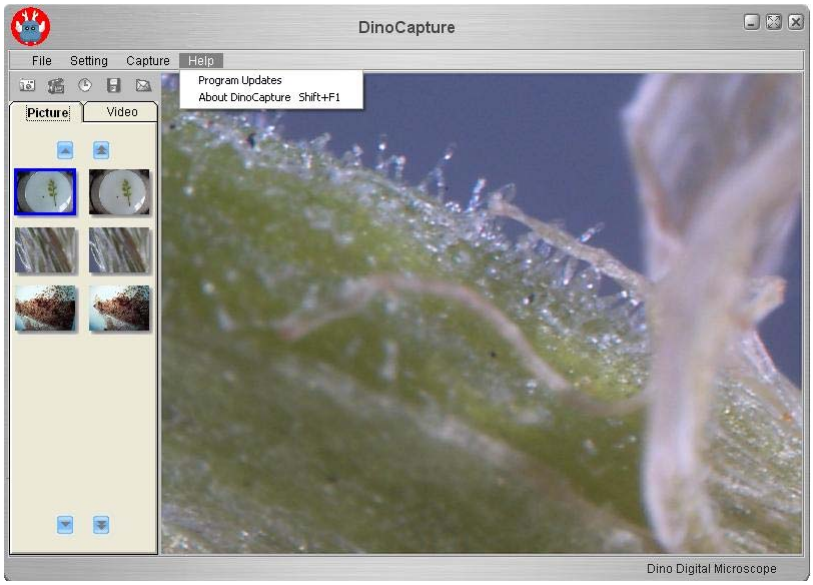
3. Capture

The picture, video and frame functions in Capture have the same functions as the buttons of in the Tool Bar.



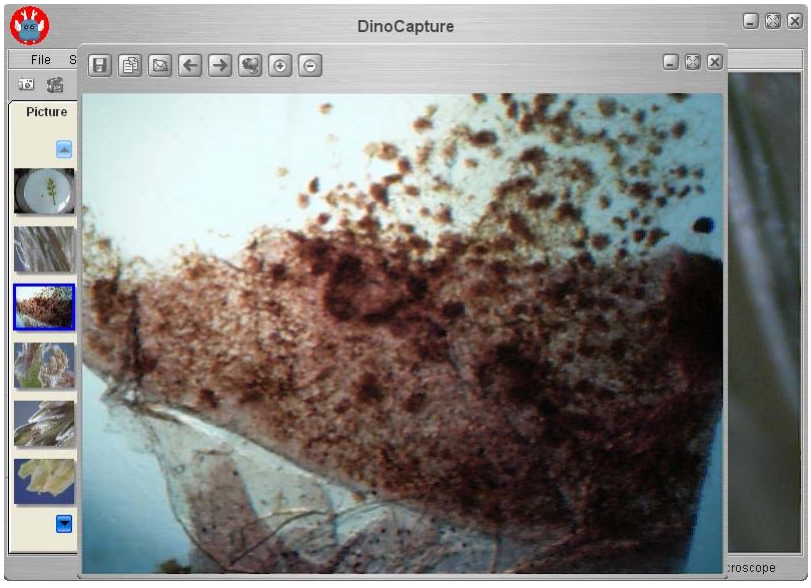
4. Help

User can use “Program Updates” in Help to download the most updated DinoCapture from AnMo web site www.anmo.com.tw



Open The Picture

The opened picture can be displayed in full screen by clicking
To return from full screen mode, just click the mouse left key.



Function Description

Save as

Copy

Mail

Previous Picture

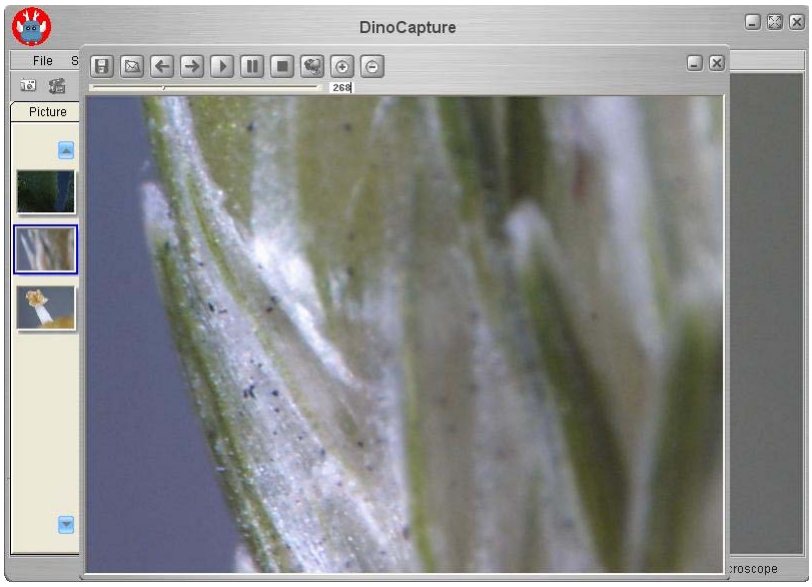
Next Picture

Share the Picture by sending the file to DinoShare under the Shared Document

Enlarge

Shrinkage

Open The Video Or Time Lapsed Video



Function Description

Play

Stop

Pause

Q&A

Q1. Why the object cannot be found on the display of digital microscope?

A: a. Please check all the connection of all necessary cable and adapter.

Q2. Why cannot work, when connect to PC?

A: a. Check driver installation is completed.

b. The USB cable is connected to Dino-Lite Handheld Microscope and PC USB port.

Q3. How to install driver?

A: a. Do not connect USB cable to Dino-Lite Handheld Microscope before driver installation.

b. Place installation CD into CD-Rom driver, select "driver installation".

Q4. If USB cable connected to Dino-Lite Handheld Digital Microscope before driver installation?

A: Remove USB cable from Dino-Lite Handheld Digital Microscope for 5 sec., and then plug it back to Dino-Lite Handheld Digital Microscope.

Q5. How to connect "DinoCapture" ?

A: Complete driver installation, connect USB cable to Dino-Lite Handheld Digital Microscope, and then Execute "DinoCapture" application procedure.

Q6. How to uninstall driver ?

A: Remove USB cable from Dino-Lite Handheld Digital Microscope, execute "uninstall" in application procedure "Dino Digital Microscope".

Q7. When connecting to PC, why the picture is slow or unsmooth?

A: a. Probably your PC's configuration is not sufficient enough. Please check the system requirements as mentioned in this User's Manual.

b. Probably your PC's CPU or memory is overloaded by executing too many application software. Try to shut down other application and restart your system to release the memory.

c. Probably your system has being attacked by virus, which may dramatically degrade your system's performance.

Q8. What should we do, if Dino-Lite Handheld Digital Microscope is not working normally?

A: Please reset the system by disconnecting all the cables from Dino-Lite Handheld Digital Microscope. Wait for about 5 sec., re-connecting the cables to restart.

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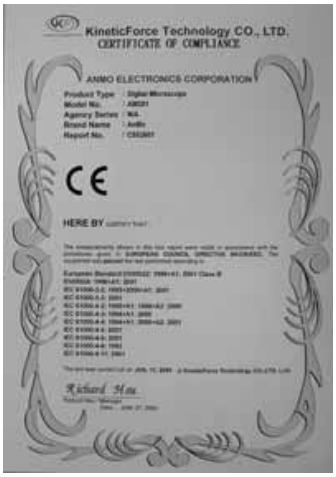
Certification

CE, FCC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ANMO ELECTRONICS CORPORATION
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KineticForce Technology CO., LTD.
CERTIFICATE OF COMPLIANCE
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Limited Liability

The manufacturer, importer, and the dealer cannot be held responsible for accidental damage, including personal injury or any other damage, due to inappropriate usage of the product.
Information in the user manual is written for the current specification of the product. The manufacturer of Dino Digital Microscope continues to provide additional functions and apply new technology to it. All specifications may be changed without notice to individual users.